

# 2007 Kentucky Freight Transportation Conference



Frankfort, Kentucky  
May 15, 2007

Kentucky Freight Transportation Conference \* Hanson Professional Services

# Outline

- Global Perspectives
- Coastal Port Perspectives
- Inland Waterway Opportunities
- Kentucky's Riverports
- Kentucky Riverport Improvement Project
- Strategic Importance of All Modes





Note 40' containers on the left and 20' on the right

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# Global Trade



US Maritime Trade:  
\$1 trillion of  
domestic and  
international freight

## Projections

- international trade to double by 2020
- Container traffic to triple by 2020
- Latin American trade through Gulf to triple (or more) by 2020

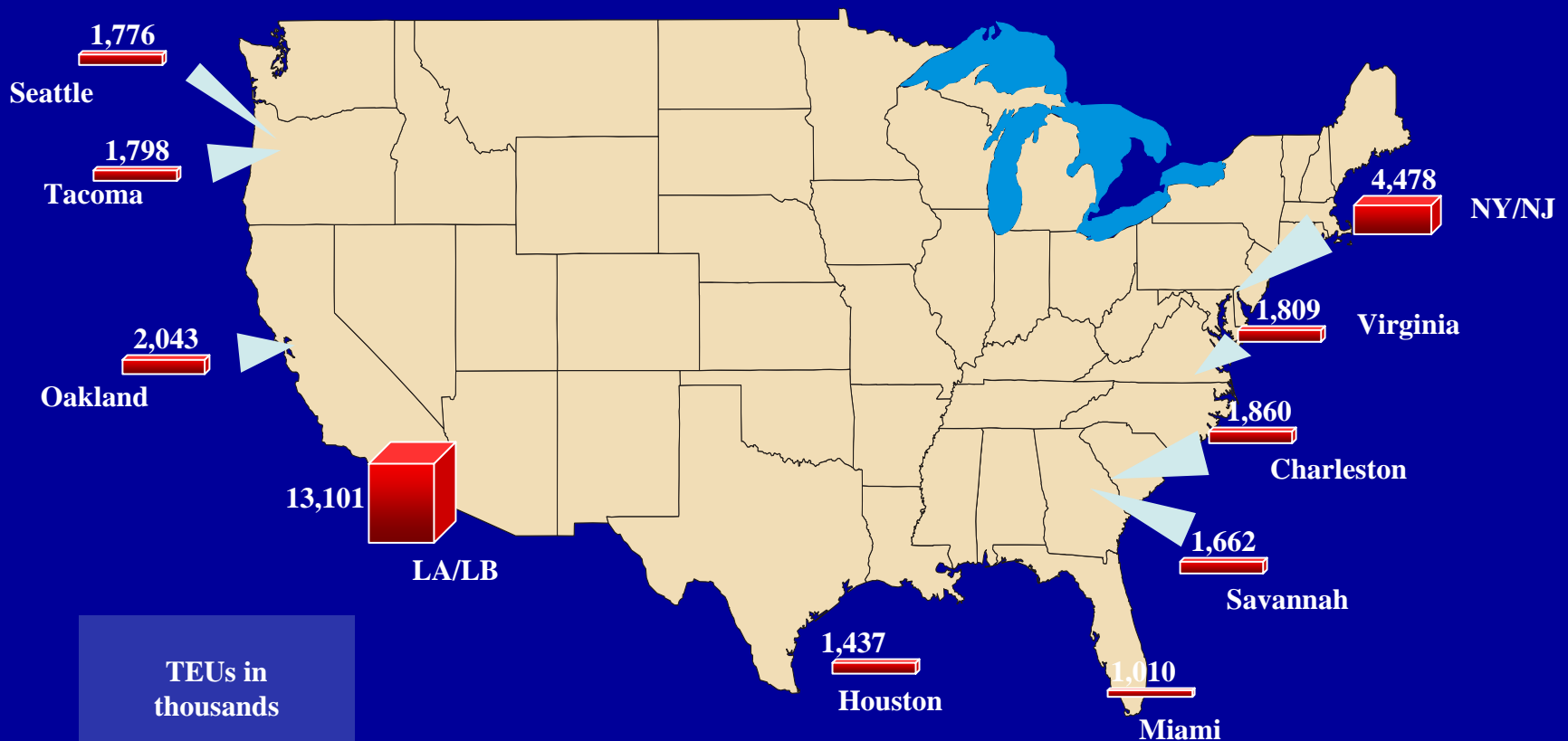




Panamax				Post Panamax	
Pre-1970	1970-1985	1985-2000		2000-2010	Post-2010
1,700 TEUs	2,300 TEUs	4,800 TEUs		8,000+ TEUs	13,000+ TEUs
<10 Boxes Wide	10 Boxes Wide	13-16 Boxes Wide		17 Boxes Wide	21 Boxes Wide
<30' Draft	33' Draft	44' Draft		48' Draft	44' Draft
450' Length	620' Length	900' Length		1,150' Length	1,350' Length

# U.S. Maritime Container Trade Growth

## Current



TEUs in  
thousands



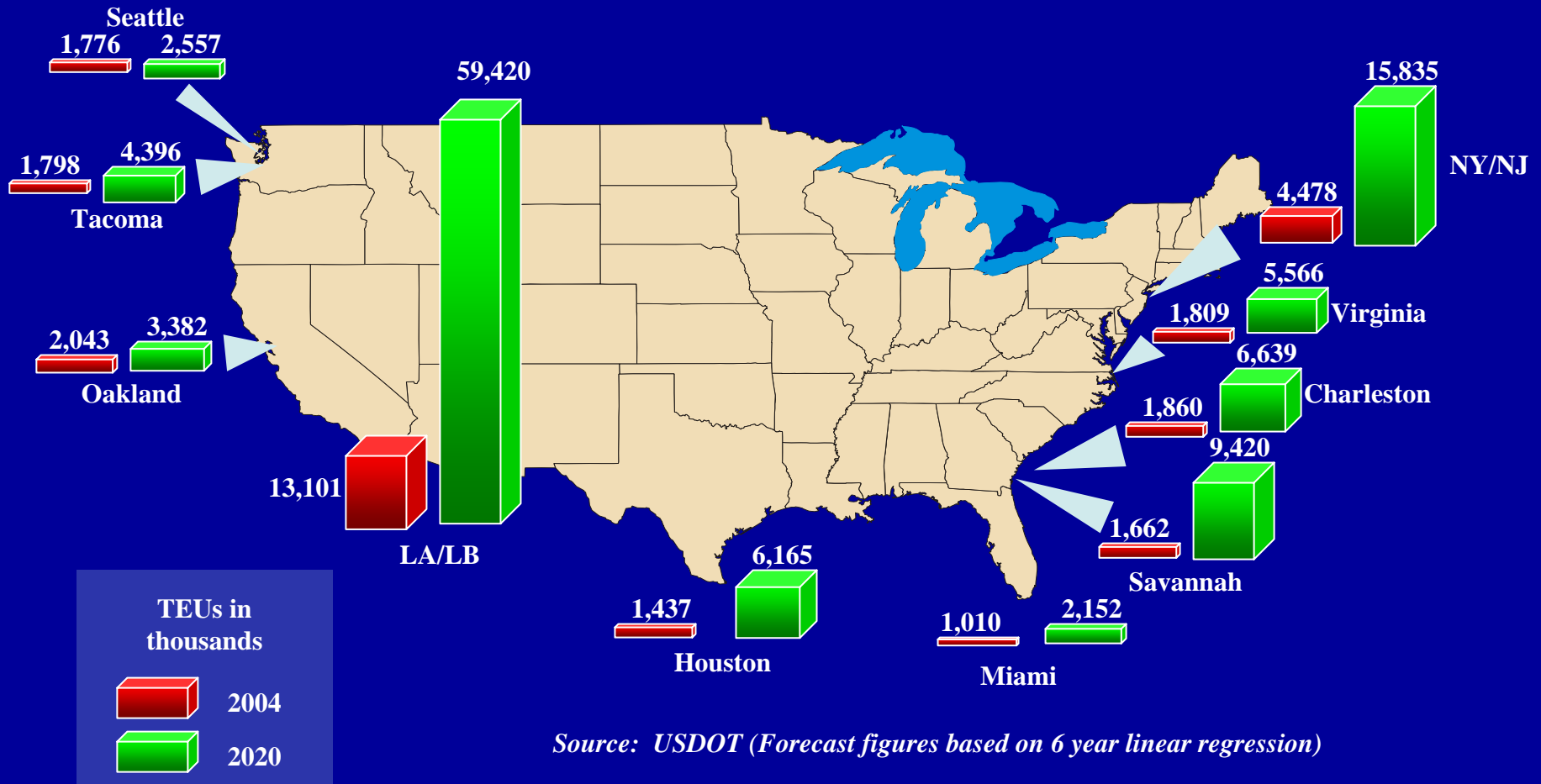
2004

Source: USDOT (Forecast figures based on 6 year linear regression)

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# U.S. Maritime Container Trade Growth

## Current and Future



# The Inland Waterway System





Ports of  
Mobile and  
New Orleans  
are rapidly  
expanding  
container  
capabilities



# The proposed Panama Canal Expansion will improve shipping opportunities between Far East & Gulf



1. Deepening/widening Atlantic entrance channel
2. New approach for Atlantic Post-Panamax locks
3. Atlantic Post-Panamax locks  
existing 110 x 1000 x 41.2 ft;  
new 180 x 1400 x 60 ft
4. Raise max Gatun Lake operating water level
5. Widening and deepening of the navigational channel of the Gatun Lake and the Culebra Cut
6. New approach channel for Post-Panamax locks
7. Pacific Post-Panamax locks with 3 water saving basins per lock chamber
8. Deepening and widening of the Pacific entrance channel

# The Inland Waterway System



# Credibility for Gulf Coast Container Ports at Mobile & New Orleans

- Growth in global trade & congestion at ports
- Mobile & New Orleans have expansion plans
- Expanded Panama Canal





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What moves by inland river barge?

Today – heavy, bulky, oversize

Future – higher valued goods

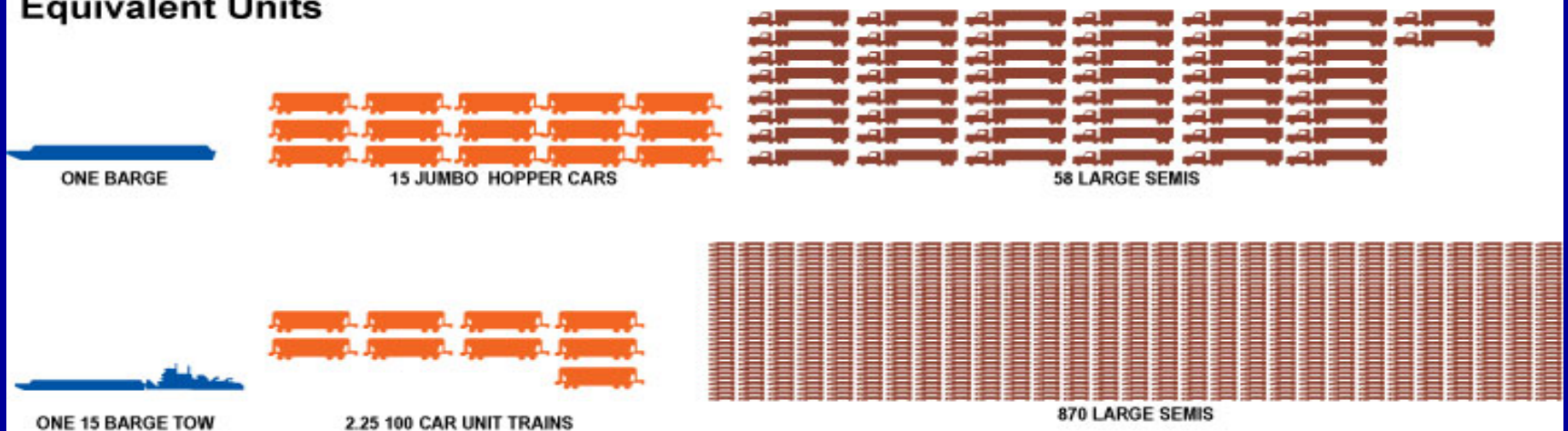


# Compare...

## Cargo Capacity



## Equivalent Units



## Equivalent Lengths



Source from Iowa Department of Transportation  
FD0401 12-01-04

## FUEL EFFICIENCY

1 gallon of fuel can move  
1 ton of cargo...



**59** miles by truck



**202** miles by train



**514** miles  
by barge



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All modes of transportation are needed



# Alabama Freight Mobility Study

- Funded by US DOT Policy & Research
- Action plan for integrating inland waterways into freight transportation network
- Developments along I-65 corridor: autos, steel, container terminal at Mobile, others

- When the Mobile Container Terminal looks like this →



- We could be looking at scenes on I-10 and I-65 like these





# Government Policy Maker Interests

- relieve congestion
- conserve energy
- highway capacity & maintenance

# Private Sector Interests

Shipper = reduce costs, improve reliability

Carrier = ROI

Ports = increase business,  
economic development

# Understanding the Business Transaction is Vital for Inland Ports

- How does the inland move fit into the business transaction for a global move?

- Who are the parties?



- Who makes the modal decisions?



- What are the contractual relationships? (follow the money)
- Understand the business transaction from customer perspective

To make COB a reality, must provide real cost savings and returns to private sector



To gain government support, must demonstrate benefits to society and environment

# AFMS – Phase 1

Results to be released by US DOT May 23, 2007

Looking around the world.....



# India is Investing – and its Economy is Growing



# NW1 Region of India





# Photos Of IWT



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And in Europe....



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# Inland navigation concept



# Conclusions

- **Alternative routing via Constanta and Danube highly attractive for trade between Asia and Central Europe:**
  - ⇒ Significant cost advantages when using specialised inland vessels
  - ⇒ Similar transit time for total supply chain
  - ⇒ Environmental balance very positive

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## Next steps

- **Distribution of final report.**
- **Involvement of overseas shipping companies and large industrial companies.**
- **Verification of inland navigation concept:**
  - Availability of Danube vessels?
  - Substitute transport (high/low water, ice)?
  - Continental cargo (silo and tank containers)?
  - Intermediate ports in Hungary and Serbia?
  - National and EU-funding (Marco Polo II)?
  - ...

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# Soon to come...also on the Danube



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# Kentucky Initiative

- Roles for State Government in Ports and Waterways
- Collaborative approach including riverports and state officials
- Survey of programs in other states
- Visits with ports, assessment of needs

# Kentucky Riverport Improvement Program – General Scope



## Operating Ports

1. Hickman-Fulton County Riverport Authority
2. Paducah-McCracken County Riverport
3. Henderson County Riverport
4. Owensboro Riverport Authority
5. Louisville-Jefferson County Riverport Authority
6. Greenup-Boyd County Riverport Authority
7. Eddyville Riverport & Industrial Dev. Authority

## Developing Ports

8. Wickliffe-Ballard County Port Authority
9. Marshall County-Calvert Riverport Authority
10. Meade County Riverport
11. Maysville-Mason County Port Authority

# *Kentucky Riverports support jobs*



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# Kentucky Initiative

Freight transportation, congestion mitigation,  
economic competitiveness are all themes

Draft report in August 2007



# Summary

- Global trade is growing
- Traffic congestion is increasing
- Waterways can help reduce congestion and enhance competitiveness of US economy
- Kentucky is blessed with access to Ohio and Mississippi Rivers
- Kentucky's Riverports are vital asset